

ACTIVITY- AND HEALTH-ENHANCING PHYSICAL ENVIRONMENTS

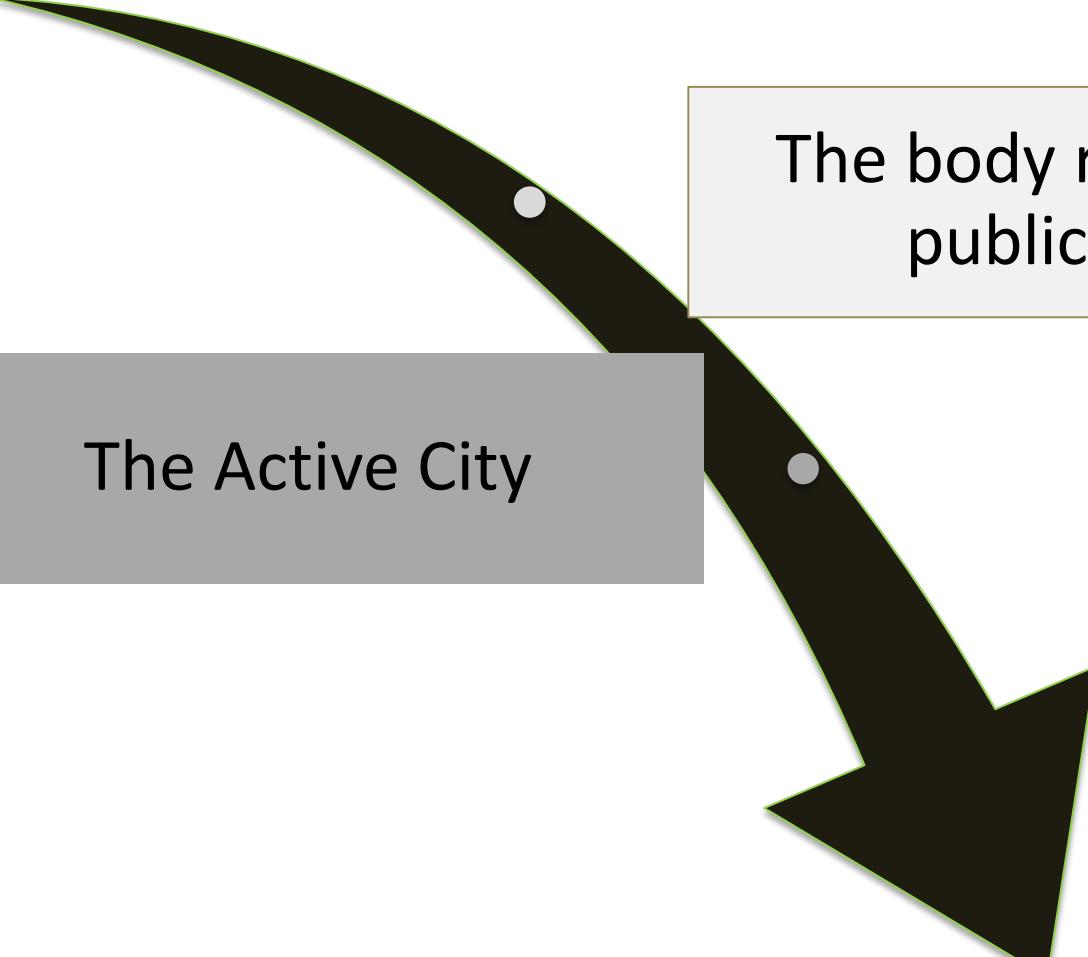
ACTION AT A LOCAL LEVEL FOR BETTER URBAN PLANNING, FOOD AND HEALTH

Conference September 1, 2016 in Copenhagen

Body and the city –
theories of the body towards the active city



*Antonio Borgogni PhD
University of Cassino and Southern Lazio
a.borgogni@unicas.it*



The facts are
clear

The body regains the
public space

The Active City

Challenges, examples
and conclusions

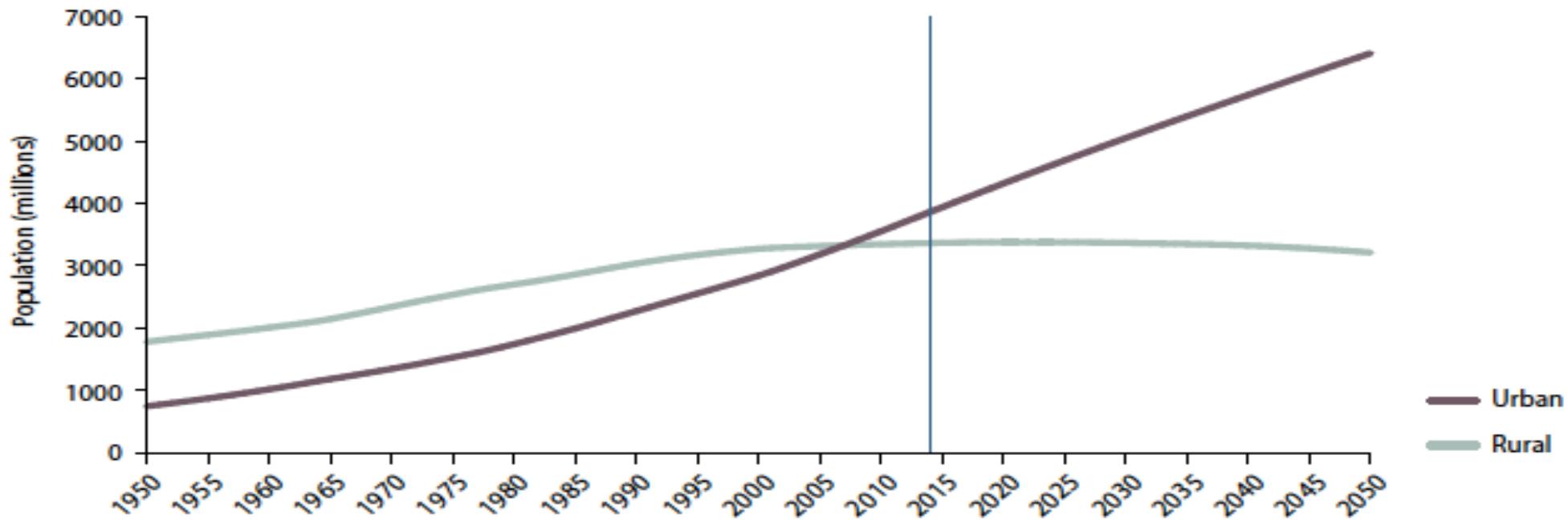
The facts are clear

Urbanization

United Nations, Department of Economic and Social Affairs, Population Division (2014).
World Urbanization Prospects: The 2014 Revision

Figure 2.
Urban and rural population of the world, 1950–2050

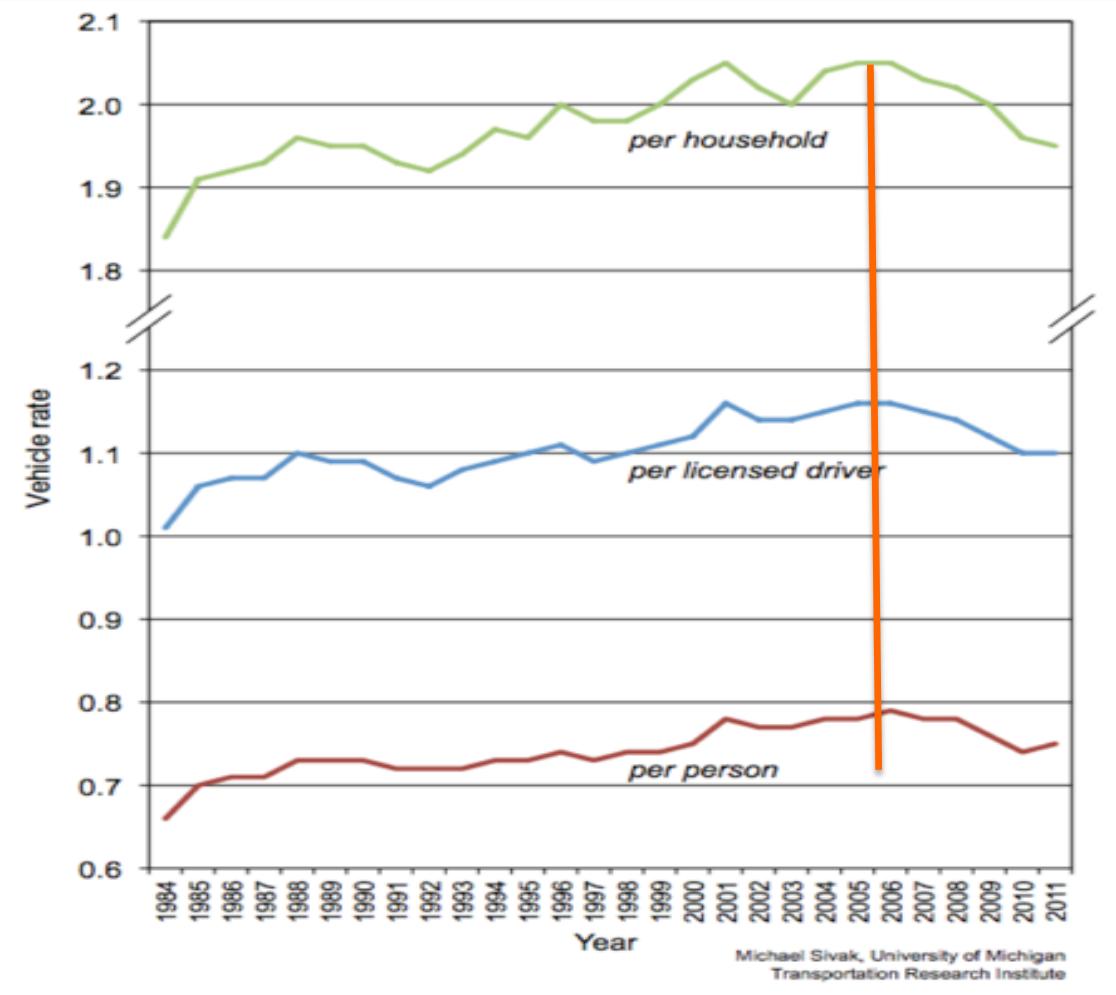
A majority of the
world's population
lives in urban areas



The world urbanization rate surpassed the 50% in 2014 (54%),
Europe 73%, expected at 66% in 2050.

Have we passed the peak car era?

Goodwin, OECD (2012). Peak Travel, Peak Car and the Future of Mobility:
Evidence, Unresolved Issues, Policy Implications, and a Research Agenda



Motorization peaks when urbanization reaches 80%

Urbanization rates for various parts of the world

| | 2012 | 2035 |
|---------------------|------------|------------|
| Japan | 92% | 97% |
| Oceania | 89% | 91% |
| MERCOSUL | 86% | 90% |
| Korea | 83% | 88% |
| NAFTA | 81% | 86% |
| ANDEAN | 80% | 85% |
| Western Europe | 77% | 82% |
| Middle East | 76% | 81% |
| Eastern Europe | 69% | 75% |
| Taiwan | 72% | 74% |
| China | 52% | 71% |
| Central America | 64% | 70% |
| Central Europe | 62% | 67% |
| ASEAN | 47% | 61% |
| Africa | 47% | 57% |
| Indian Subcontinent | 32% | 43% |
| Rest of the World | 29% | 42% |
| World | 55% | 65% |

Source: IHS

Traffic and pollution

Royal College of Physicians. Every breath we take: the lifelong impact of air pollution. Report of a working party. London: RCP, 2016

Urban **traffic** is one of the main **causes** of

- Particulates (**Pm10**) pollution
(road transports produce more than 25% of the total emissions)
- The 50% of the presence of **nitrogen oxide, carbon monoxide, and benzene** in the cities air.

Car traffic contribute to the 33% of the Pm10, to around 40% of NOx, 66% of benzene and a due terzi del benzene e della CO₂ /carbon dioxide).

Barriers to physical activity and sport

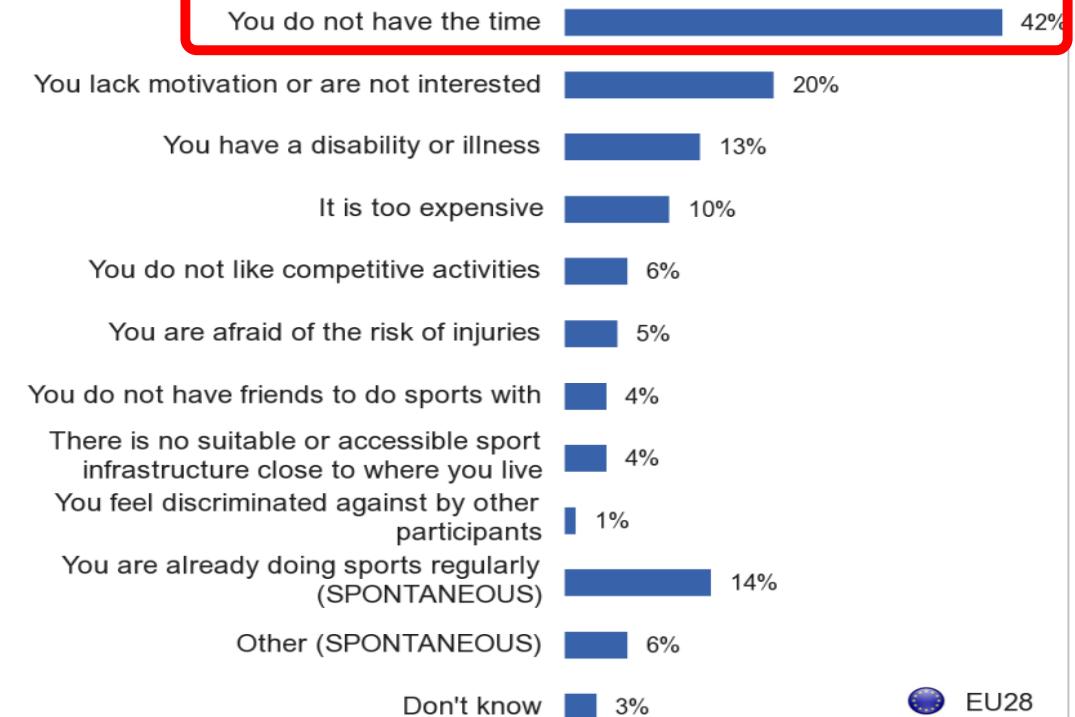
Table 5 Percentage of subjects in each member state selecting different perceived barriers to increasing levels of physical activity/exercise

| Country | Work/study | Not the sporty type | Looking after children/elderly | No need | Poor health | No energy | Too old | Other |
|-------------|------------|---------------------|--------------------------------|---------|-------------|-----------|---------|-------|
| Austria | 32 | 22 | 16 | 13 | 13 | 10 | 11 | 42 |
| Belgium | 23 | 33 | 8 | 10 | 9 | 8 | 14 | 16 |
| Denmark | 21 | 15 | 13 | 13 | 13 | 11 | 7 | 19 |
| Finland | 16 | 12 | 10 | 6 | 14 | 19 | 3 | 30 |
| France | 31 | 26 | 9 | 15 | 9 | 9 | 5 | 12 |
| Germany | 13 | 33 | 10 | 18 | 10 | 15 | 10 | 20 |
| Greece | 44 | 17 | 15 | 6 | 13 | 5 | 9 | 12 |
| Ireland | 25 | 18 | 16 | 12 | 9 | 11 | 6 | 16 |
| Italy | 46 | 24 | 13 | 8 | 6 | 6 | 6 | 8 |
| Luxembourg | 26 | 18 | 22 | 11 | 9 | 12 | 13 | 12 |
| Netherlands | 25 | 21 | 11 | 9 | 12 | 13 | 11 | 12 |
| Portugal | 23 | 26 | 6 | 8 | 10 | 7 | 12 | 11 |
| Spain | 37 | 31 | 16 | 10 | 26 | 13 | 21 | 3 |
| Sweden | 17 | 25 | 10 | 6 | 10 | 16 | 6 | 21 |
| UK | 27 | 15 | 13 | 8 | 10 | 11 | 11 | 3 |
| EU average* | 28 | 25 | 12 | 12 | 11 | 11 | 10 | 12 |

*Weighted according to population size.

Zunft, H. J. F., Friebel, D., Seppelt, B., Widhalm, K., Remaut de Winter, A. M., Vaz de Almeida, M. D., ... & Gibney, M. (1999). Perceived benefits and barriers to physical activity in a nationally representative sample in the European Union. *Public Health Nutrition*, 2(1A), 153-160.

QD9. What are the main reasons currently preventing you from practising sport more regularly?



Eurobarometer 412 (2014)

Frank L.D., Sallis J.F., Conway T.L., Chapman J.E., Saelens B.E., Bachman W. (2006).
Many Pathways from Land Use to Health. Associations between Neighborhood Walkability and Active Transportation,
Body Mass Index, and Air Quality.
Journal of the American Planning Association, Vol. 72, No. 1, Winter 2006, 75-87.

Neighbourhood Quality of Life Study (NQLS)

- King County, Washington
- Interdisciplinary
- 16 neighbourhoods ranked by walkability index
- 1228 adults 20-65

5% increase in walkability is associated with

- a per capita 32.1% increase in time spent in physically active travel,
- a 0.23-point reduction in body mass index,
- 6.5% fewer vehicle miles travelled,
- 5.6% fewer grams of oxides of nitrogen (NOx) emitted,
- 5.5% fewer grams of volatile organic compounds (VOC) emitted.
- these results connect development patterns with factors that affect several prevalent chronic diseases.

Physical activity (new?) classification

Egoistic p.a.

practised for diverse aims
(fitness, health, leisure, competition...)

above all for my own interest and pleasure that could, indirectly, enhance public health

Altruistic p.a.

practised for diverse aims
(commuting, urban mobility, shopping...)

for my own interest and pleasure at the same time directly enhancing public health and sustainability

Egoistic/altruistic



*The Body Regains the Public Space:
a historical perspective*

The body regains the public space

Essaouira (Morocco)





The body regains the public space
(Amsterdam)



The body regains the public space

What are the
conditions allowing
this behaviour?

Mariehamn (FI),
2009



The body regains the public space

Hertogenbosch (NL)



The body regains the public space

Hertogenbosch (NL)



The body regains the public space

Utrecht (NL)



The body regains the public space
Ferrara (IT), end of the 19th century



The body regains the public space Ferrara 1960



The body regains the public space
Ferrara nowadays



The turn point: the traffic calming approach (1970-onward)



The current trend: Shared Spaces

Minimise the separation/segregation removing road signs and traffic lights



Shared spaces: based on interaction

I am convinced that the principle of shared space and low-speed, civilised streets could be beneficially applied [everywhere]. Although the urban form, scale and context is often very different [...] it is working with the grain of **human behaviour** [**based on responsibility**] and **interaction** which lies at the heart of shared space. Successful shared space tends to rely on a close relationship between streets and their immediate context – the buildings and activities, landmarks and geography that surround streets. [...] Once drivers receive the right cues, and are "**told the right story**", making use of common **courtesies and negotiation** is no great problem.

Ben Hamilton-Baillie (p.c., Congress for the New Urbanism, 2014)

ACTIVE CITY

Definition

A healthy, active city is one that is continually creating and improving opportunities in the built and social environments and expanding community resources to enable all its citizens to be physically active in day-to-day life

(Edwards & Tsouros, 2008)



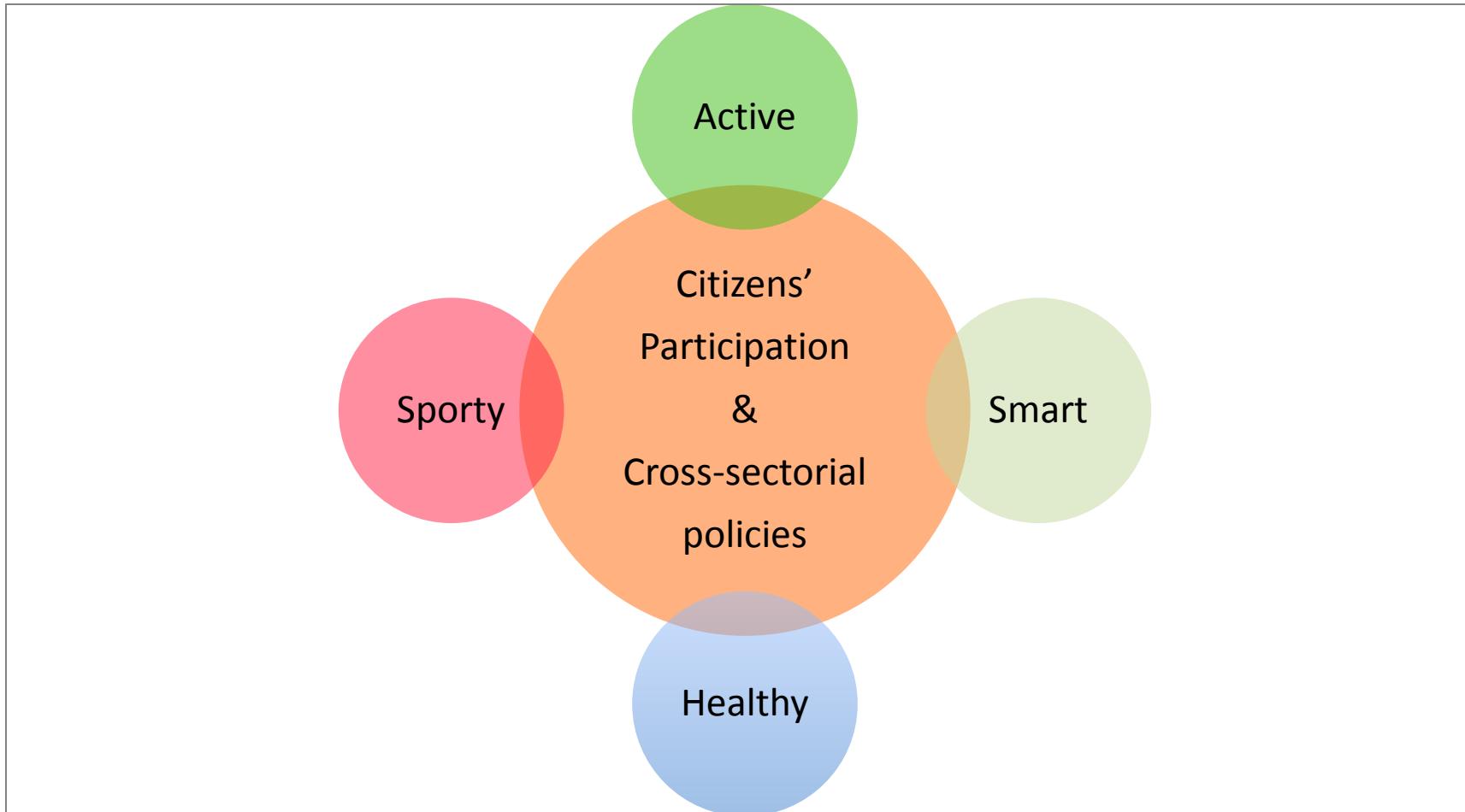
Peggy Edwards and Agis D. Tsouros



**A healthy city
is an active city:**
a physical activity planning guide



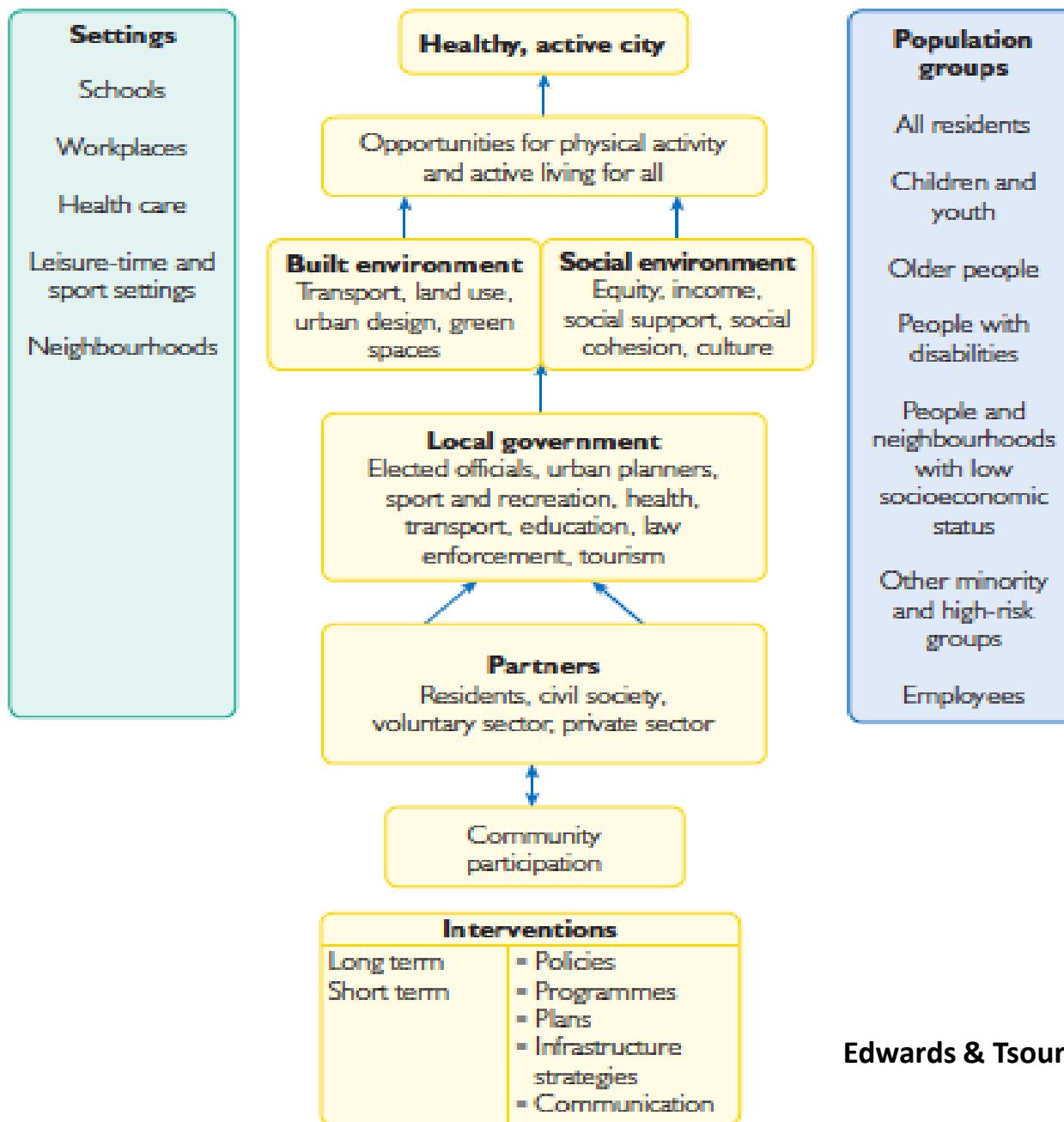
City for everyone



Directions and models

Edwards & Tsouros, 2008

Fig. 1. A framework for creating a healthy, active city



The “big eight” model (Rütten, 2010)

Concept

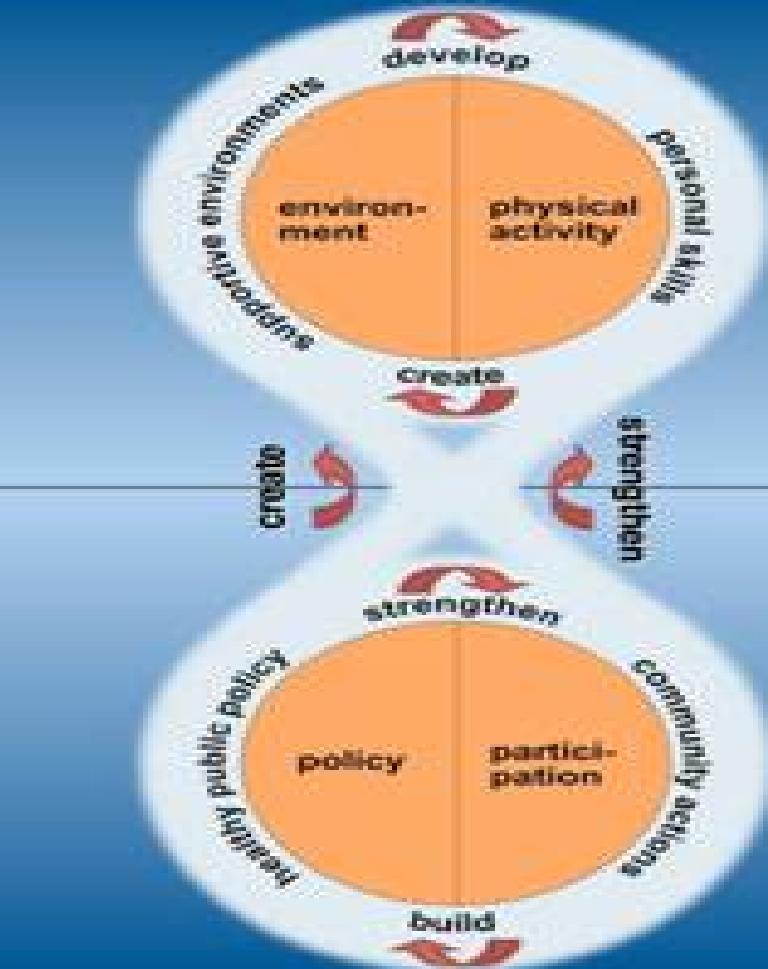
Evidence

Good Practice

Interplay between structure and agency

operational level

political level



Classification



Types of LTPA infrastructures

Sport Facilities



Leisure-Time Infrastructures
that provide specific opportunities
for LTPA



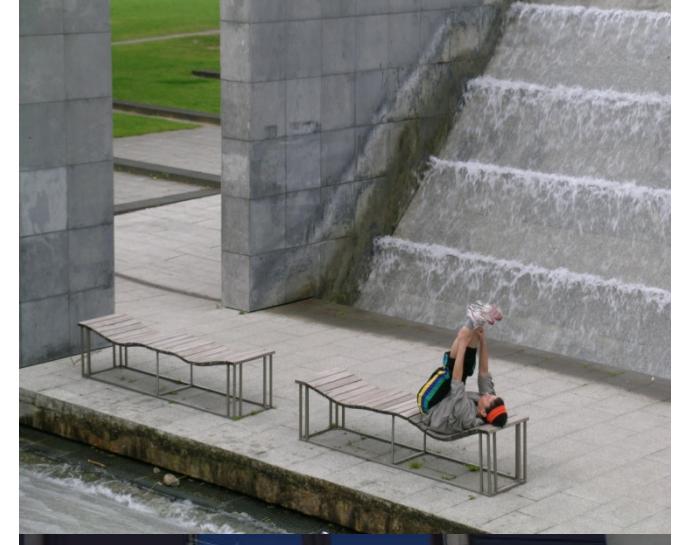
Urban and Green Spaces
that are usable for LTPA



Urban and green spaces usable for PA: sub-classification

Part of the historical heritage
of the town (parks, walls...)

- Preserved
- Rehabilitated
- Abandoned/disregarded



Urban and green spaces usable for PA: sub-classification

Recent interventions/additions

Specialized (playgrounds, skate parks, jogging/walking paths...)

Not specialized (sidewalks, cycle paths, green areas...)



Urban and green spaces usable for PA: sub-classification

Objects of informal appropriation, places hard-won by “human bodies”

- Body “traces”, paths
- Light modifications
- Heavy modifications





The active city

Concept

Evidence

Good Practice

Interplay between structure and agency



The active city

Concept

Evidence

Good Practice

Interplay between structure and agency





User experience

Design

The body regains the public space

(Ferrara and Helsinki)



The body regains the public space

(Ferrara and Helsinki)



ECONOMIC BENEFITS

COST SAVINGS
JOB GROWTH
PRODUCTIVITY



SAFETY BENEFITS

LESS CRIME
FEWER PEDESTRIAN AND CYCLIST INJURIES



THE BENEFITS OF **CITIES DESIGNED TO MOVE**

SOCIAL BENEFITS

BETTER COHESION
INCREASED CIVIC ENGAGEMENT



ENVIRONMENTAL BENEFITS

REDUCED POLLUTION
IMPROVED CLIMATE



HEALTH BENEFITS

LESS DEPRESSION, ANXIETY AND STRESS
LESS OBESITY AND CHRONIC DISEASE





Conclusions: proposals and challenges

The (public) space is socially constructed: place and space

Social construction of the space: people walking, playing, seating



“the place is a space where the life occurs” (Eichberg, 2008)

“a city is rendered worthless without people. It simply cannot exist because it needs people to make a city” (De Certau, 1984)

Tight and Loose spaces

Franck and Stevens (2006)

The spaces are **tight** when allowing only particular, and planned, uses, while the **loose** spaces offer opportunities to carry out diverse activities.

It is people's actions that create loose spaces. When various activities, unrelated to the original designed purpose of a particular space, are tolerated, space may become loose, more open and socially accepting.

The loose spaces, in combination with some specialized, tight spaces, could be the right option to enhance, from a urban planning view point, the active city perspective.

Jardin du Luxembourg and Centre Pompidou, Paris



Tight (?): Raisio (Finland)



Adaptability and flexibility (Seine's river banks)

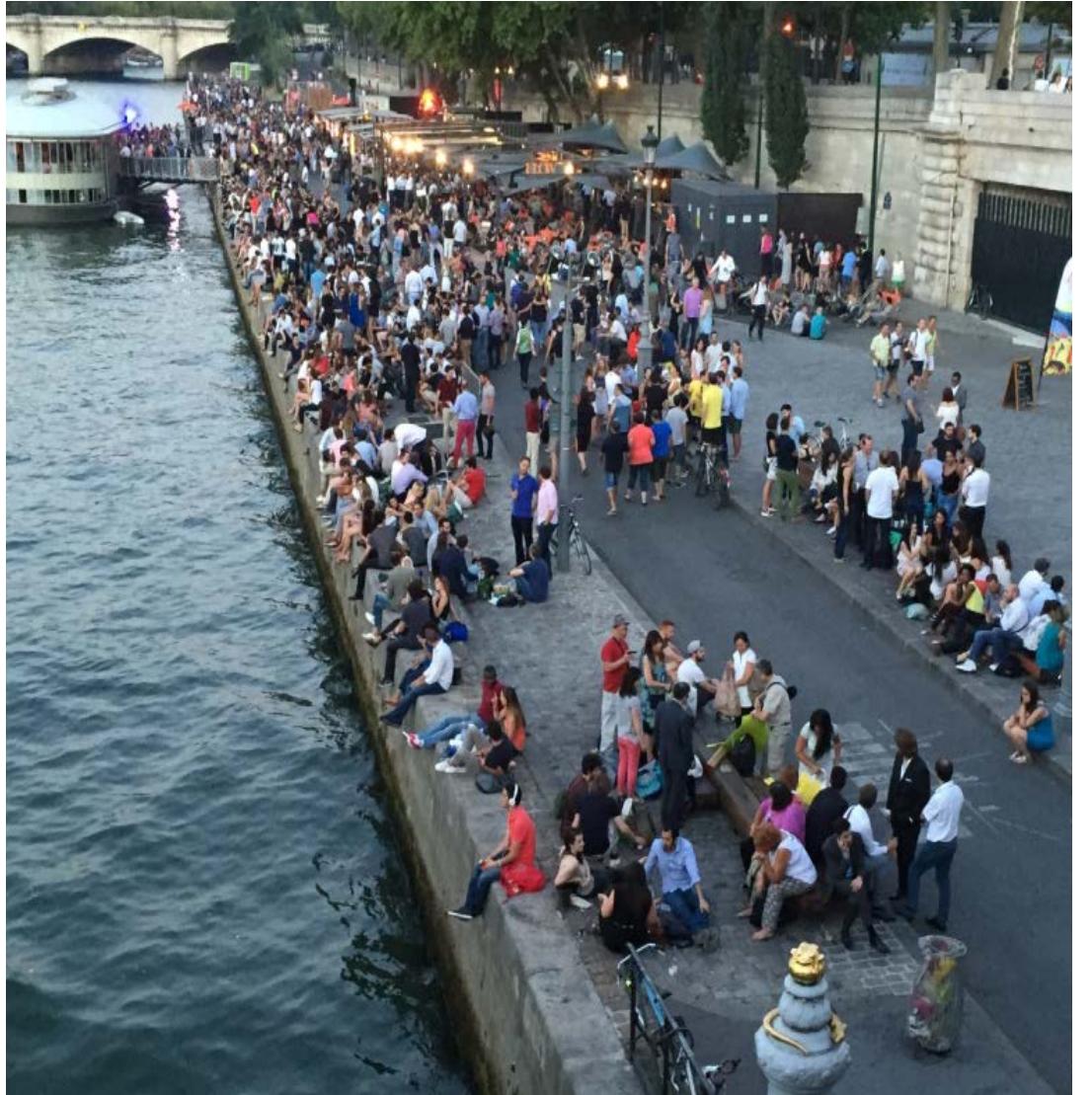
Adaptable= the potential of a space to accommodate different uses without any significant modifications to its physical attributes

Flexible= a space accommodating different uses by being easily changed.

(Rapoport, 1990)



Paris Seine's Banks



Porosity

*At the base of the cliff itself, where it touches the shore, caves have been hewn... As porous as this stone is the architecture. Building and action interpenetrate in the courtyards, arcades, and stairways. In everything, they preserve the scope to become a theatre of new, unforeseen constellation. **The stamp of definitive is avoided.** No situation appears intended for ever, no figure asserts it 'thus and not otherwise'. This is how architecture, the most binding part of the communal rhythm, comes into being here..."*

Porosity is the inexhaustible law of life in this city.

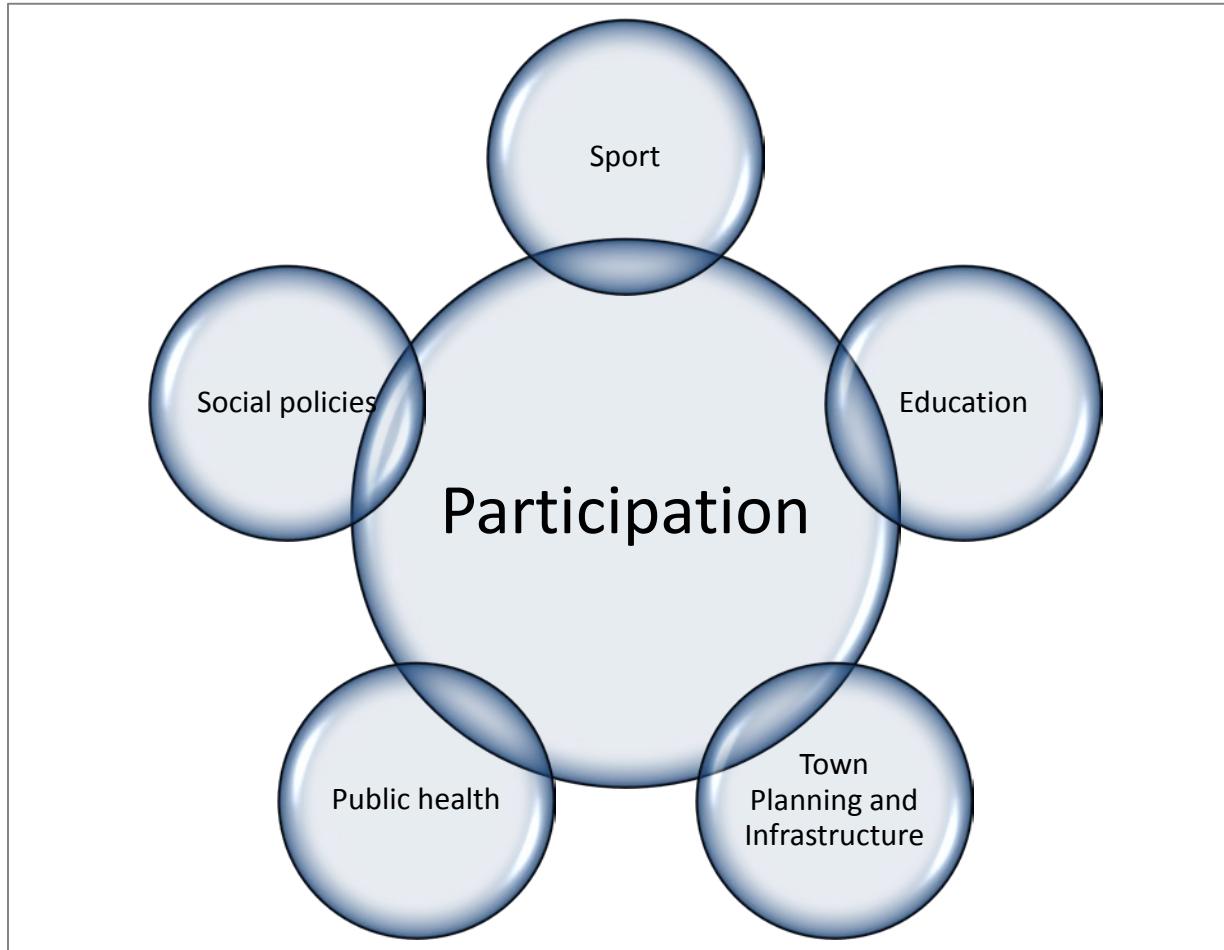
(Benjamin & Lācis, 1924/1978)



Even the heroes need a fortuitous place to rest...
(Wiesbaden, 2012)



Participatory planning



Challenges

- How to develop inter-sectorial researches and policies? “Healthization”, “architecturalization”, “town planningzation”, “sportization”, “sociologization”are “impossible games”
(Edward & Tsouros, Rutten, Suomi)
- How to build a specific INTEGRATED model tailored to the needs of every specific CONTEXT
- How to involve disadvantaged, low SES, weak citizens
- How to rehabilitate city deprived areas making them active
- Definitively, how to deal with the risk to make active city excluding poors: “Developing democracy [through physical activity] by reducing inequality in the public space”
(Secchi, 2013)

Many vulnerable people denied care, says Age UK

By Nick Triggle
Health correspondent, BBC News



A “catastrophic” situation is developing in England with many vulnerable elderly people being denied care, campaigners say.

An analysis by Age UK found the proportion of over-65s getting help had fallen by a third since 2005-6.

Related Stories

[A Sliding Doors moment for the NHS?](#)

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